



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,403	01/22/2001	Veronique Douin	05725.0833-00	7304
22852	7590	02/12/2004	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 1300 I STREET, NW WASHINGTON, DC 20005			YU, GINA C	
			ART UNIT	PAPER NUMBER
			1617	

DATE MAILED: 02/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**RECEIVED**

FEB 12 2004

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

**TECH CENTER 1600/2800**

Paper No. 19

Application Number: 09/766,403  
Filing Date: January 22, 2001  
Appellant(s): DOUIN ET AL.

---

LOUIS TROILO  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed October 30, 2003.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) Status of Claims**

The statement of the status of the claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Invention**

The summary of invention contained in the brief is correct.

**(6) Issues**

The appellant's statement of the issues in the brief is correct.

**(7) Grouping of Claims**

The appellant's statement in the brief that certain claims do not stand or fall together is not agreed with because the subject matter of the each set of the claims as grouped by applicants is not patentably distinct from one another and/or rejected under a single rejection. Applicants also present no different arguments for each group of the claims.

**(8) Claims Appealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

5,925,341	CERVANTES et al.	7-1999
WO 99/36047	CASPERSON et al.	7-1999

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-9, 11-21, 23-25, 30, 33, 50, 51 and 55-84 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US 5,925,341 (Cervantes et al.) in combination with WO 99/36047 (Caspersen et al.).

US '341 is directed to an oil-in-water nanoemulsion that contain nonionic amphiphilic lipids and aminated silicones wherein the oily globules have an average size of less than or equal to 150 nm (title and abstract). For polyethylene glycol isostearate as the nonionic amphiphilic lipid, see column 3, lines 20-24. For 0.3 to 3 wt.% of aminated silicone, see column 7, lines 1-5. For ionic amphiphilic lipids such as behenyltrimethylammonium chloride, see column 11, lines 16-18. The amount of ionic amphiphilic lipid is from 0-10 wt.% of the emulsion (col. 11, lines 24-29). For water-soluble, water-dispersible and liposoluble cosmetic and dermatopharmaceutical active agents, see column 12, lines 5-33. For oil globules sizes in the range of 30 to 150 nm and 40 to 100 nm, see column 12, lines 45-49.

Example 1 at column 13, line 64 to column 14, line 17 contains 4.5 wt.% polyethylene glycol isostearate, 1.6 wt.% behenyltrimethylammonium chloride, 15 wt. % avocado oil and 1.75 wt.% amodimethicone with an oil globule size of about 95 nm. See claims 1, 2, and 3 for the weight ratio of oil or oily phase to amphiphilic lipid. See claim 8 for an aminated silicone. See claims 14-16 for the amount of aminated silicone in the emulsions. See claims 17-20 for an ionic amphiphilic lipid. See claims 21-25 for the amount of ionic amphiphilic lipid. See claims 26 and 27 for the amount of oil. See claim 28 for cosmetic and dermatopharmaceutical active agents. See claim 29 for a composition containing the nanoemulsion of the reference. See claims 30-32 for the

Art Unit: 1617

average size of the oil globules. See claims 38 and 39 for application of the nanoemulsion and a composition comprising the nanoemulsion to keratin material. While US '341 does teach at column 12, lines 15-34 that actives such as thickeners may be added to the nanoemulsion, the reference does not teach a nonionic block polymer as instantly claimed.

WO '047 teaches the use of polyether-polyurethane block copolymers in hair care compositions for the enhanced rheological and conditioning benefits (abstract). For Applicant's elected species of nonionic polymer, see Aculyn 46 at page 5, lines 5-12. For an amount of nonionic polymer that falls within the instantly claimed weight percent range, see page 5, lines 19-21. The nanoemulsion obtained by the combination of cited prior art containing the same components as instantly claimed in the same amounts would be expected to exhibit the same properties. Therefore, absent evidence to the contrary, the turbidity of the nanoemulsion is not considered critical to the invention.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add a nonionic block polymer as taught by WO '047 to the nanoemulsion of US '341 with the reasonable expectation of obtaining enhanced rheological and hair conditioning benefits.

**(11) Response to Argument**

**A. The combined teachings of '341 and WO '047 patents establish a prima facie of obviousness of the present invention.**

Examiner asserts that the skilled artisan would have been motivated to combine the '341 and WO'047 patents because (i) both patents are directed to cosmetic

compositions such as hair products; (ii) the '341 reference teaches adding thickening polymers; (iii) both the '341 nanoemulsion and the WO '047 aqueous composition have continuous aqueous phase; and (iv) the nonionic block polymer used in WO'047 is taught to enhance rheological and hair conditioning properties. These facts are clearly set forth in the references, and applicants' argument that the references fail to provide motivation for a skilled artisan to combine the teachings is erroneous and unpersuasive.

**B. Applicants' arguments are unpersuasive to overcome the prima facie obviousness of the present case.**

**(1) Claims 1-9, 11-21, 23-25, 30, 33, 50, 51, 55-69**

Applicants assert that the rejection fails to show *how* one skilled in the art would have been motivated to add the polyether-polyurethane polymers in WO '047 in the composition of the '341 patents. In response, examiner notes that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, the rejection is based on combined teachings of the two references that are directed to cosmetic hair compositions and thus relevant to the present invention. It must be also pointed out that '341 specifically teaches the application of the nanoemulsion in making hair dyeing compositions. See '341, col. 13, lines 4 – 14. The WO '047 reference specifically teaches that the nonionic block polymer in the hair

Art Unit: 1617

dyeing composition provides rheological and hair conditioning benefits. Incorporating a thickener which is old and well-known in cosmetic art to make a hair care composition for the specifically known benefits of the polymer would have been obvious, absent a clear and convincing evidence to the contrary.

Applicants argue that there is no motivation to add the nonionic block polymer which is used in an "aqueous environment" in WO '047, into the "oil-in-water nanoemulsion environment" in the '341 reference, examiner notes that both compositions have continuous water phase. An oil-in-water nanoemulsion is an aqueous dispersion of the nanoparticles of oil grabules. See '341, col. 1, lines 52 – 62. There is nothing nonobvious about using a thickener for a water solution such as the hair dye composition in WO'047 to modify the viscosity of the water phase of the '341 oil-in-water nanoemulsion. Again, the disclosure of the particular cosmetic properties of the WO '047 thickener, i.e., the improvement in rheological and hair conditioning benefits, would have been the driving force to use this particular thicker to modify the '341 nanoemulsion cosmetic composition.

In the rejection, what is offered as an evidence to support the prima facie case of obviousness is not a "broad conclusory statement" as applicants allege; rather, the rejection is based on the specific teachings of the '341 and WO '047 references. Applicants' assertion that there is no "clear and particular" evidence to combine the references is erroneous because, as set forth in the rejection and reiterated in this argument, the references do provide the motivation to use the WO '047 nonionic block polymer because of the expectation of improved rheology and hair conditioning benefits

Art Unit: 1617

of the composition. Applicants are silent as to why these specific teachings are insufficient to provide the motivation to make the present invention. Nor applicants provide any objective, persuasive reasons that would deter a skilled artisan from using the well-known cosmetic thickener in WO '047 in the '341 cosmetic nanoemulsion.

**(2) Claims 70-84**

The rejection should be maintained for claims 70-74 because claims 70 and 73, which are independent claims, recite the same structural limitations of the nanoemulsion of claim 1. Claims 70 and 73 merely recite the intended use and purposes of the nanoemulsion, which are not given patentable weight. In response to the applicants recurring argument that the rejection fails to provide any motivation to combine the '341 and WO '047 patents to make the claimed invention, examiner respectfully disagrees for the reasons explained above.

Similarly, as for claims 75-78, 79, and 80-84, applicants' argument that the prior arts fail to teach the claimed process of using and making the nanoemulsion is contrary to the combined teachings of the references and unsupported by any factual evidence.

For the above reasons, it is believed that the rejections should be sustained.



Respectfully submitted,

Gina Yu  
Patent Examiner

February 6, 2004

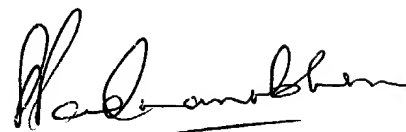
Conferees

*Primary Examiner*

*S. ✓*

*SHENGJUN WANG*

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER  
LLP  
1300 I STREET, NW  
WASHINGTON, DC 20005



**SREENI PADMANABHAN  
SUPERVISORY PATENT EXAMINER**

*2/9/04*